

## SMALL DEPRESSION POCOSIN (BLUEBERRY SUBTYPE)

**Concept:** Small Depression Pocosins are shrubby wetlands of small basins that have shallow and short-lived surface flooding, with dense shrub layers of species shared with Peatland Pocosin communities. The Blueberry Subtype consists of those where *Vaccinium formosum* and/or *Vaccinium fuscatum* dominate and other pocosin shrubs are less abundant. This subtype is quite rare, and it is unclear what drives its occurrence and distinction from the other subtype.

**Distinguishing Features:** Small Depression Pocosins are distinguished by the presence of a dense shrub layer that fills all or most of the basin. The Blueberry Subtype is distinguished by the dominance of *Vaccinium fuscatum* and *Vaccinium formosum* over more typical pocosin shrubs. Other deciduous shrubs not characteristic of pocosins, such as *Eubotrys racemosa* or *Viburnum nudum*, should be counted along with the *Vaccinium* in determining predominance.

**Synonyms:** *Vaccinium formosum* - *Vaccinium fuscatum* / *Sphagnum cuspidatum* Shrubland (CEGL003907).

Ecological Systems: Southern Atlantic Coastal Plain Depression Pondshore (CES203.262).

**Sites:** Small Depression Pocosins usually occur in shallow limesinks, less often in relict dune swales or small Carolina bays.

**Soils:** Soils have a shallow to deep organic surface layer. All occurrences are smaller than the minimum map unit for soil surveys and are included in the surrounding upland soil units.

**Hydrology:** Surface water is shallow and seldom persists far into the growing season. Saturation may persist for much of the year. Examples may have small, deeper pools that hold water longer.

**Vegetation:** The vegetation is a dense shrubland with a variable density of trees. *Vaccinium formosum* and *Vaccinium fuscatum* are the most abundant species. Associated shrub species may include abundant *Lyonia lucida*, *Cyrilla racemiflora*, *Lyonia ligustrina*, or *Zenobia pulverulenta*, as well as less typical pocosin species such as *Eubotrys racemosa* or *Lyonia mariana*. *Smilax laurifolia* may be abundant. Trees range from an open canopy to sparse. Species may include *Pinus serotina*, *Nyssa biflora*, *Acer rubrum* var. *trilobum*, and *Pinus taeda*. Herbs are generally sparse, but *Sphagnum* spp. may occur in large patches. *Anchistea virginica* is the only other frequent and abundant herb, but species such as *Rhynchospora fascicularis* and *Andropogon glaucopsis* have been noted in openings.

**Range and Abundance:** Ranked G3? but perhaps rarer. It is extremely rare in North Carolina, with only a handful of examples known. Examples are in the Bladen Lakes region and the far northeastern part of the state, but others could be found elsewhere in the Coastal Plain. This community also occurs in South Carolina.

**Associations and Patterns:** This community tends to fill entire small basins, with only small inclusions that are more open. The Blueberry Subtype is currently known only from relict dune fields.

**Variation:** Examples are too rare to define variants. Some examples are transitional to other communities, with a fairly dense tree canopy or an unusually open shrub layer.

**Dynamics:** Dynamics of the Blueberry Subtype are particularly poorly known. They probably are similar to the Typic Subtype, but the deciduous shrub layer is less likely to carry intense fire through the community. Questions of why this community develops in particular places are similar to those for the Typic Subtype. The occurrence in relict dunes may be important, as these areas more often have Sand Barren communities that carry fire less well than other longleaf pine communities.

**Comments:** Only a single CVS plot is attributed to this community, and it appears to be only marginally developed (e.g., it has a large component of *Pinus palustris*). The factors that create the Blueberry Subtype rather than the Typic Subtype are not known. The Blueberry Subtype may occur in steeper-sided basins. It probably has deeper water and possibly a longer duration of flooding, but it may also dry more and be less saturated when the water goes down.

**Rare species:** No rare species are known to be associated with the Blueberry Subtype.

**References:**